

EIS001971

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Dear Ms. Dixon,

2-28-00

This comment is a citizen comment on the Draft E.I.S. for Yucca Mountain. My perspective is that of a land owner in an historic community on the Mississippi River approximately 15 miles down-river from the NSP Prairie Island Nuclear Plant and Independent Spent Fuel Storage Installation. My consideration of the issues involved in the proposed action and the no-action alternative is informed by my experience with the Minnesota Environmental Quality Board's Citizen Site Advisory Task Force for the Goodhue County Alternative Siting Process (1995-97); during which time NSP also submitted an application for to the NRC for what would have been one of the nation's first off-site ISFSI's - in our community. While we were spared the E.I.S. process by the PFS application for the Utah/Goshute site, we continue to take the process of siting high level nuclear waste very personally.

A LARGE 'BACK YARD'

1 [Our citizen's group C.U.R.E. has remained active, trying to keep abreast of developments. Through our experience, we gained a vastly expanded understanding of "our back yard", which continues to apply to Prairie Island and extends, as far as we can tell, to Utah and even to Nevada. We remain deeply concerned about the standards and criteria applied to any site, timely promulgation of rulings, environmental impacts, and the siting of nuclear waste on Native American lands. We continue to look to state and federal agencies for the cohesive analysis of possible nuclear waste scenarios that is so critical to a successful and responsible long term waste management program. Unfortunately, the D.E.I.S. for Yucca Mountain, despite its cost, bulk and data, does not seem to have put us any closer to this goal.]

2 [I spent a portion of autumn, 1999 in the Minnesota State Archives reviewing the record of the second site process with which Minnesota was fiercely engaged from 1983-1987. From the reports, comments and testimony submitted to the federal government (NRC, DOE & Congress) by Minnesota's Nuclear Waste Council and state agency staff, I got an excellent perspective on the interplay of political, technical and strategic factors in the siting process. A number of the critiques and recommendations that Minnesota made during that period could still be applied. Unfortunately, limited time and resources prevent me from utilizing insights from that review. My conscience has been sharpened, however, by reliving the 5-7 years when Minnesota faced, with similar resistance and fears, the prospect that Nevada now faces. During that time, Minnesota reviewed federal reports on primary and secondary containment, site characterization, and transportation. The state grappled with state's rights issues, even submitting an amicus brief on Nevada's suit, and attempted to support standards that Minnesotans knew that they might have to live with. I am well aware of the unresolved issues and inadequacies of the process.]

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While DOE is limited by law from considering any other site, it nevertheless must consider, as you has done, the default scenario of indefinite (or permanent) on site storage. I have read each section of the D.E.I.S. that pertains to the no-action alternative. This is, of course, our most immediate concern. However, I find that opportunities for intervention and comment continually outstrip the resources I have available in my life to properly address them. I will therefore address the fundamental assumptions of the no-action alternative that have lead me to conclude that:

THE NO ACTION ALTERNATIVE IS NOT AN ALTERNATIVE

Indefinite at-reactor storage is already a reality. 100 year on-site storage has been part of the mix of options which DOE has assumed and 'indefinite' (i.e., from 100 to 10,000 years) at reactor storage has been the DOE default position for decades. The D.E.I.S. has taken a simplistic approach to the evaluation of this reality, treating at-reactor storage as a specter instead of a current reality with a wide variety of possible interfaces with a central-storage facility such as that proposed by the D.E.I.S. at Yucca Mountain.

The no-action alternative would provide a credible basis for an evaluation of options' ONLY IF DOE were to actually proceed with a rigorous evaluation of the entire continuum of on-site storage scenarios - with environmental impacts for each current site, with cumulative impact studies and technological contingency analyses for long term storage containment, entombment, transfer and transportation technologies.

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WATER: A CENTRAL FACTOR IN DEGRADATION AND CONTAMINATION

What the no-action alternative does do very effectively, is to establish water (& the freeze-thaw cycle) as the primary factor affecting rate of canister and fuel/cladding degradation and the potential for criticality incidents of 3 kinds (as outlined). The D.E.I.S. also establishes that water will provide the primary pathways (surface and ground) for release, exposure and eventual contamination. It posits that just 50 years after maintenance/ oversight ceases, radioactive materials will begin to enter the ecosystem. This is a central concern, then, for any facility. But for the 72 ad hoc permanent at reactor sites across the country, many of which are on significant bodies of water, this spells disaster.

D.E.I.S EVADES ANALYSIS OF AT-REACTOR STORAGE BY POSITING REGIONAL STORAGE.

Instead of analyzing this factor, the D. E. I. S. evades it by positing for the purpose of analysis, 5 regional sites and proceeds to map the water exposure potential of various regions of the country. This is simply inadequate.

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OTHER PROBLEMATIC ASSUMPTIONS (appendix K, & section 7): The structure of the analysis of the no-action alternative is built upon a series of hypothetical 'assumptions' for 'consistency' or 'purpose of analysis'. While this is an understandable strategy, it cannot be used to entirely evade analysis of the situation that the no-action alternative would actually create, which is 72 de-facto, at reactor storage sites with high exposures to water and people for an indeterminate period of time. Nor is it likely that other assumptions of the no-action analysis will be met (e.g.) "1) that the spent fuel and high level radioactive waste would be treated, packaged and stored in a condition ready for shipment to a repository" and that 2) a double barrier of cask and concrete storage module.

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The assumption that 10,000 years of institutional control is even a possibility is vain and vacuous; the D.E.I.S. does not even attempt to explain how it might be possible. And an analysis where "the long term impact analysis used recent climate and meteorological data, assuming they would remain constant throughout the evaluation period", is completely incredible. The D.E.I.S. offers this rejoinder:

"DOE recognizes that there could be considerable changes in the climate over 10,000 years (precipitation patterns; ice ages, global warming, etc.) but, to simplify the analysis, did not attempt to quantify climate changes" (at K-3)

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ISOLATION ISSUE: -EPA EXCLUSION FACTORS:

In addition, the no-action alternative violates the most basic principles of the federal government's responsibilities to assure health, safety and the general welfare, in diffusing both known and unknown hazards of long term storage throughout the nation. The no-action alternative undermines the fundamental goal that underlies the entirety of nuclear waste policy and programming: isolation. Most of the 72 (?) commercial as well as the 5 DOE sites are situated near water and people. This contradiction cannot be evaded. There is also a contradiction of permanent at reactor storage with the original EPA exclusion factor: omitting reactor sites from consideration for repository (i.e. permanent) siting because of the potential for multiple exposures.

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IMPLICATIONS OF UNCERTAINTIES NOT EVALUATED:

While the uncertainties, in outline, under long-term impacts of the no-action alternative in appendix k are thorough, the implications of the uncertainties for the 72 at reactor storage sites, are simply sidestepped. This is irresponsible, given the likelihood that any number of possible combinations of the no-action alternative already are and will continue to be in play, whether or not Yucca Mountain proceeds.

General Methodology: (K.2) The analysis did not consider uncertainties associated with relegating the management of spent fuel to the "commercial utilities". According to the D.E.I.S, utilities are to continue to manage their spent nuclear fuel at 72 nuclear power generating facilities for an unspecified period of time. (How is this assumption reconciled with the assumption of regional storage?) Despite NRC concerns about how deregulation will affect nuclear waste management at the plants, no analysis of this factor was included. Instead, the E.I.S. - again comparing apples and oranges - chose to use DOE managed sites for 'purposes of analysis'.

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DOE D.E.I.S. ESTABLISHES NO-ACTION AS A MAJOR FEDERAL ACTION

It is clear that DOE (like NRC) is unwilling to grapple with the implications of the no-action alternative. This DOE action - the naming of indefinite on-site storage as an alternative in a federal EIS - simply moves the no-action alternative from a default position to the status of a major federal action. Therefore all 72 reactor sites (and 5 DOE sites) should qualify, under the consultation and cooperation clause - & sections 116 and 118 - of the Nuclear Waste Policy Act for federal grants to do essential analysis that NRC and DOE have not done.

Please comment. Please outline how affected entities, states, tribes, and communities would apply for federal grants.

THE FINAL TEST: COMMON SENSE

There is one final test, perhaps the most important test that the no-action alternative fails to meet. It is included because of the startling consistency of feedback that I have received both from the general public and from persons in official positions since I began to try to explain my concerns regarding the no-action alternative. I have varied my explanation sufficiently to test whether or not my bias was the primary reason for the consistency. The response I received ranged between point a and point b:

Point a) "You're kidding, right?" (disbelief)

Point b) "No...that's absurd!" (suspended disbelief?)

This response has led me to the conclusion is that the final test that the no-action alternative fails to meet ---- is the test of common sense. According to my survey, the public vote is: NO CONFIDENCE.

CIRCULARITY OF DOE USE OF 'WASTE CONFIDENCE DECISIONS' - EXTENDING OR APPLYING ISFSI PERMITS TO THE NO-ACTION ALTERNATIVE IS IRRESPONSIBLE:

The habitual circularity of using the waste confidence decision as a basis for regulatory evaluation of de-facto interim storage now in place at the plants, has reached a 'critical' point. These facilities and their cask technologies were permitted under ISFSI requirements; both casks and facilities have initial twenty-year licenses, reflecting the health, safety and environmental impact thresholds they were intended to meet. These thresholds, timelines and state permits, in turn, were at least in part based upon federal 'confidence decisions' regarding a central federal storage facility. This was certainly the case in Minnesota's Limited Certificate of Need Decision for Dry Cask Storage on Prairie Island.

It seems that the no-action alternative intends that ISFSI standards simply be extended to meet the options that it outlines without benefit to states, tribes or local communities of the guidelines or compensation packages outlined in the MRS or Federal Repository siting processes; without benefit of environmental evaluation of site-specific long-term at-reactor storage; and without financial assurance for the maintenance, monitoring and continued technological developments to ensure responsible management of nuclear wastes in the face of innumerable uncertainties/unknowns.

"For consistency with the Proposed Action, this analysis assumed the No-Action scenarios would begin in 2002" (7.2, paragraph 2)

Does this mean that if any dimension of the recommendation process for permitting for Yucca Mountain falters on its timeline, that the no-action alternative would be automatically triggered? Please explain.

NO IMPACT CONCLUSION OF D.E.I.S. CANNOT BE APPLIED TO ISFSI PERMITS

The conclusions of the D.E.I.S. of 'no impact' cannot be applied to the extension of ISFSI facility permits. The D.E.I.S. neither considered nor established criteria or standards for detailed site characterization for at-reactor site storage.

NO ACTION ALTERNATIVE VIOLATES FUNDAMENTAL PRINCIPLES IN FEDERAL LAW, THAT PRESENT ACTIONS NOT CREATE DISPROPORTIONATE COSTS FOR FUTURE GENERATIONS.

I believe that this principle is specifically addressed in both federal environmental and nuclear waste management acts.

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PERMITS AND GUIDELINES BASED UPON TERM-OF-STORAGE BECOME MEANINGLESS; NO-ACTION ALTERNATIVES THREATEN STATE LAW AND REGULATION

As a major feature of this conundrum, we are now looking at ad hoc divestment strategies on the part of utilities in which taking advantage of ISFSI standards (and deregulation) may play a central role. Waste management deadlines and timelines continue to be manipulated in both legislative and regulatory contexts ~~(with the apparent cooperation of the NRC)~~ year after year, scenario after scenario, ~~to the benefit of the industry~~ and to the detriment of the general welfare that the original Act was charged to protect. The establishment of the no-action alternative in the D.E.I.S., signals that "term-of-storage" which once was a central factor in NRC guidelines, a pivot point in law and rule-making ---- has become meaningless*. With it, a large number of state laws and regulations, falter and threaten to fail. Minnesota is only one, if an ever-exceptional, example. The balance of state and federal rights and responsibilities under a no-action scenario are an additional uncertainty with a variety of potential repercussions.]

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CONCLUSION/S

As the 'test of common sense' illustrates, the most difficult aspect of trying to respond formally to the no-action alternative in the context of the draft E.I.S. for Yucca Mountain is that it really does not 'make sense.' The conclusion of 'no impact' for the no-action alternative simply eluded my most tenacious attempts to understand the process by which this conclusion was reached. Internal contradictions are fundamental; assumptions evade both the current reality of the no-action alternative and the very scenarios that are posited by the alternative.

The 'belief' of the drafters of the E.I.S., given to frame the no-action alternative, is perhaps the most problematic of all: that neither of the no-action alternatives is likely to happen. From the perspective of those of us living in the vicinity of adhoc interim at-reactor-site storage, which would become defacto permanent storage under either an official no-action alternative or simply by continued failure on the part of DOE to fulfill its contract, this 'belief' is nonsense. It makes sense ONLY if the structure of the no-action alternative is entirely disingenuous: if what the drafters mean is that it is not likely that a 100 year storage period will be without institutional oversight, and that institutional oversight throughout a 10,000 year period is not likely. This would, of course, be true. But then, the whole structure of the alternative would have been set up to undermine itself. I do not choose to 'believe' that this was the intention -- even if it was. I prefer to attribute the disjunction to the human capacity for denial -- which has proved to be one of the most abiding factors of nuclear waste policy and politics. This is the fundamental dynamic that we must change. To this end, the following 2 recommendations must be seriously considered in the final E.I.S.:

* The D.E.I.S. no-action alternative effectively undermines a fundamental distinction between a permanent federal repository and other sites for nuclear waste (formerly called temporary and interim) which was term-of-storage. Hence, again, the relevant status of affected governmental units for states, tribes and communities proximate to the 72 commercial and 5 DOE sites (at least).

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1) INVENTORY AND RELISENCING: Utility re-licensing goals are driving storage schemes and timing. The D.E.I.S. does a fine job of establishing the spent fuel inventory that would be accommodated by the Yucca Mountain facility. It is a stunning fact that in the early 60's we had no inventory of commercial nuclear waste, and that Yucca is designed to accommodate some 70,000 metric tons, generated in just the last few decades. The waste to be accommodated at Yucca Mountain, does not include wastes generated under renewed reactor licenses. DOE must elaborate (and NRC must consider) the impact implications of continued generation of waste past present license terms for the 72 sites, under the no-action alternative.

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2) FEDERAL GRANT PROGRAM/S TO COMPLY WITH THE PURPOSE OF SECTIONS 116 & 118 OF THE NUCLEAR WASTE POLICY ACT, MUST BE REACTIVATED. The considerations which have been extended to Nevada, MRS and second site candidates must now be extended to states, tribes and communities proximate to all 72 at-reactor and 5 DOE storage sites. The analysis which DOE fails to do, must be done by states and other affected 'persons'. The analysis must be timely. Therefore, these grant opportunities must be provided immediately upon the issuance of the final E.I.S. If it maintains the no-action alternative without evaluating the 72 site scenario; without repairing the assumptions and internal contradictions, raised by the public, which have facilitated evasion of analysis of impacts and implications.

Yours most truly,


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 corrected
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